

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 16 of 25

Attorney's Docket No.: 10104-018001

REMARKS

Claims 1-79 were pending and stand rejected. Claims 1, 33, 36, 37, 44, 76, and 79 are in independent form. Applicant amended claims 1 and 33 and added new claims 80-82. Claims 80 and 81 depend from claims 1 and 44, respectively. Claim 82 has independent form. Claims 1-82 are now pending. The applicant respectfully requests reconsideration in view of the following remarks.

SECTION 103 REJECTIONS

Claim 1 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 6,526,456 to Allan et al. ("Allan") in view of U.S. Patent No. 6,745,207 to Reuter et al. ("Reuter"). Applicant respectfully traverses the rejection because the applied references, either alone or in combination, do not disclose or suggest limitations of claim 1. For example, claim 1 recites a method for providing on-line rental service for software. The method includes, *inter alia*, assigning a collection of virtual containers to a set of users including one or more users, each virtual container in the collection being configured to identify one or more software products that are rented by users in the set. As recited, claim 1 requires an assignment of a collection of virtual containers to a set of users. Furthermore, each virtual container of the collection of virtual containers is configured to identify one or more software products that are rented by users in the set of users to whom the collection is assigned. Thus, virtual containers are assigned to a user, and one or more software products are identified by the assigned virtual containers as being rented by users of the set.

For reasons set forth below, Allan does not disclose or suggest the claimed assigning step. Allan discloses a method in which a software product is modified so that it can be freely distributed while limiting its use to authorized subscribers. *See* Allan, at Abstract. The modification includes replacing calls to relocatable subroutines in the software product with calls to redirection software, which is added to the software product together with authorizing software. *See id.* A table of information about the replaced call is supplied to an authorizing agent. *See id.* Replacing the calls obscures the control thread of the software product and,

BEST AVAILABLE COPY

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 17 of 25

Attorney's Docket No.: 10104-018001

consequently, the modified software product is no longer executable without information regarding the replaced calls. *See id.*, at col. 4, lines 48-50 and 63-65. When a subscriber attempts to execute the software product from a client computer, the authorizing software (which was added to the software product) communicates with and provides to the authorizing agent information regarding the subscriber and the client computer. *See id.*, at col. 4, line 63 – col. 5, line 10. In response, the authorizing agent establishes a subscriber's agreement to a business relationship, which may be a new agreement or a continuation of a previous agreement. *See id.* On being satisfied that it should do so, the authorizing agent generates (from information regarding the client computer, the subscriber agreement, and the replaced calls) an authorization subroutine that is unique to the client computer and the subscriber and, furthermore, provides the authorization subroutine to the client computer. *See id.* The unique authorization subroutine allows the subscriber to execute the software product, but only at the client computer. *See id.*, at col. 5, lines 16-20.

Without conceding the point, Applicant respectfully submits that Allan, at best, suggests the general proposition that software products can be associated with subscribers in a process that rents software products to subscribers. Allan simply provides no disclosure that supports a more detailed proposition regarding the relationship between software products and subscribers. The only disclosures pertinent to the relationship between software products and subscribers that Allan provides are (i) an explanation of the business relationship of a subscriber's agreement and (ii) an explanation of how the authorizing agent determines that the subscriber is authorized to use the software product. In regards to the subscriber's agreement, Allan's explanation consists of nothing more than statements that the subscriber's agreement is arbitrary. *See, e.g., id.*, at col. 5, line 5; and col. 7, lines 19-23. In regards to the authorizing agent's determination, Allan's only explanation lies in step 37 of FIG. 2, which step is a condition precedent to the agent's providing an authorization subroutine to a subscriber. The entirety of Allan's explanation for step 37 is that the authorizing agent "verifies authenticity of the subscriber using the SD database 28 in any variety of known ways." *Id.*, at col. 7, lines 39-41. (The SD database 28 is a database that includes subscriber information. *See id.*, at col. 4, line 24.) Applicant respectfully

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 18 of 25

Attorney's Docket No.: 10104-018001

submits that statements providing that the subscriber's agreement is arbitrary do not shed any light on how software products are associated with subscribers. Nor does the explanation that the authorizing agent authenticates subscribers before providing an authorization subroutine. Thus, the only pertinent information that Allan provides does not disclose or suggest any relationship between software products and subscribers that is more specific than the above-mentioned general proposition.

Applicant respectfully submits that the general proposition, assuming *arguendo* that such a proposition can be inferred from Allan, is insufficient to disclose or suggest the claimed assigning step, which requires the assigning of a collection of virtual containers to a user, where each of the virtual containers is configured to identify software products rented by the subscriber. In particular, associating software products with subscribers does not disclose or suggest assigning virtual containers to subscribers, where each of the virtual containers is configured to identify software products rented by the subscriber. The latter includes the use of virtual containers while the former in no way suggests such use. The difference is significant because, by virtue of their configuration and ability to identify software products that are rented by the user, the claimed virtual containers allow indirect association of rented software product to a user and increase flexibility in renting software. Thus, Applicant respectfully submits that Allan fails to disclose or suggest the claimed assigning step.

Reuter also fails to disclose or suggest the claimed assigning step. Reuter relates to storage area networks and discloses the use of virtual disks in conjunction with a storage pool hierarchy, which use provides a separation between the virtual disks and physical storage devices. See Reuter, at col. 1, line 64 – col. 2, line 1. However, Reuter does not disclose or suggest the renting of software products. Moreover, as set forth below, there is no disclosure in Reuter, including the portions to which the Examiner cites, that teaches assigning a collection of virtual containers to a set of users. Nor is there any disclosure in Reuter that each virtual container of a collection of virtual containers is configured to identify one or more software products that are rented by users in a set of users to which the collection is assigned, as required by the claimed assigning step.

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 19 of 25

Attorney's Docket No.: 10104-018001

Col. 5, lines 43-67 of Reuter describes a virtual disk. The virtual disk, Reuter explains, is independent of physical storage and is a logical object that contains data stored on behalf of a host. *See id.* Operations of the virtual disk are similar to operations of a locally attached physical disk. For example, a write operation transfers data from the host system to a set of consecutively indexed data blocks. *See id.* Furthermore, implementations of the virtual disk can save space by not allocating physical storage to any block that has never been written. *See id.* Management operations can treat a virtual disk as an independent object and expose relationships between virtual disks. *See id.* Applicant respectfully submits that none of the described operations is one that identifies one or more software products that are rented by users. Furthermore, none of the described operations assigns a collection of virtual disks to a set of users. Thus, while Reuter describes a virtual disk, there is no disclosure in Reuter that the virtual disk is configured to identify one or more software products that are rented by users to whom the virtual disk is assigned, as required by the claimed assigning step, or that the virtual disk is assigned to a set of users, as also required by the claimed assigning step.

Col. 11, lines 13-22 of Reuter provides that, in some embodiments, a management interface can be provided directly at a host computer system. In some embodiments, Reuter explains, one or more host systems receiving storage services from a system may be configured to issue management commands such as a snapshot command to the system. *See id.* (A snapshot command typically causes generation and storage of a snapshot, which is generally data that describes the state of a virtual disk.) Applicant respectfully submits that neither providing a management interface nor issuing management commands constitutes and, thus, discloses or suggests a virtual container that is configured to identify one or more software products that are rented by users, as required by the claimed assigning step. Providing a management interface and issuing management commands also do not constitute and, hence, do disclose or suggest assigning of a collection of the virtual containers to a set of users, as also required by the claimed assigning step.

Col. 15, lines 22-26 of Reuter describes a system for managing virtual storage. The system includes a virtual disk and a storage pool hierarchy to encapsulate physical storage within

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 20 of 25

Attorney's Docket No.: 10104-018001

a representative name space that is independent of physical storage. *See id.* The storage pool includes sub-pools, each of which references zero or more data containers, and each data container used for virtual storage is referenced by only one sub-pool. *See id.* Applicant respectfully submits that nothing in this portion of Reuter discloses or suggests that the virtual disk identifies one or more software products that are rented by users to whom the virtual disk is assigned, as required by the claimed assigning step. Nor is there any suggestion in the portion at issue that the pool hierarchy and its sub-pools somehow give the virtual disk the ability to so identify rented software objects, as required by the claimed assigning step. Nor is there any suggestion that virtual disk is assigned to a set of users, as required by the claimed assigning step.

Thus, although Reuter discloses a virtual disk, Reuter does not disclose or suggest the renting of software products. There is no disclosure in Reuter that teaches a virtual container of a collection of virtual containers that is configured to identify one or more software products that are rented by users in the set of users to which the collection is assigned, as required by the claimed assigning step. Nor is there any disclosure in Reuter that a collection of virtual containers is assigned to a user, as required by the claimed assigning step. For at least the above reasons, Applicant respectfully submits that Reuter, like Allan, also fails to disclose or suggest the claimed assigning step.

Moreover, the combination of Allan and Reuter does not disclose or suggest the claimed assigning step. As discussed above, Allan, at best, suggests the general proposition that software products can be associated with subscriber in a method that rents software. Allan provides no disclosure that would allow the inference of a more specific proposition. Reuter discloses virtual disks that are separate from the physical disks but does not contemplate renting software, assigning virtual containers to users, or virtual containers that are configured to identify software rented to users to whom the containers are assigned. As such, Reuter provides no disclosure or suggestion that would make more specific Allan's general proposition or that would change the process by which Allan rents software. The only change to Allan's system suggested by Reuter would be in the management of Allan's physical storage devices. In particular, Allan's system

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 21 of 25

Attorney's Docket No.: 10104-018001

would be adapted to include a storage pool hierarchy so that its application sever 10 and authorizing agent 12 can store information on virtual disks that are separate from the local physical storage devices. Thus, the combination of Allan and Reuter, assuming *arguendo* that there is motivation for such a combination, is not a system that performs the claimed assigning step. Rather, the combination is a system as described by FIG. 1 of Allan, except that the application server 10 and authorizing agent 12 can store and access information on virtual disks that are separated from the local physical storage devices. Such a system would rent software in accordance with the method shown in FIG. 2 of Allan, which does not perform the claimed assigning step.

As established above, none of Allan, Reuter, or their hypothetical combination discloses or suggests the assigning step of claim 1. For at least this reason, claim 1 and its dependent claims are in condition for allowance.

Moreover, claim 4 specifies that the above-discussed assigning step includes assigning the collection of virtual containers to the set of users according to a subscription for renting software products. As discussed above, Allan, at best, suggests the general proposition that software products can be assigned to subscribers. Applicant respectfully submits that associating software product to subscribers does not necessarily include and, hence, disclose or suggest assigning virtual containers according to a subscription for renting software, as required by claim 4. Thus, Allan fails to disclose or suggest claim 4. As discussed above, Reuter does not contemplate renting software. Reuter consequently does not disclose or suggest assigning virtual containers according to a subscription for renting software. Thus, Reuter fails to disclose or suggest claim 4. As discussed above, the hypothetical combination of Reuter is a system that rents software as described in FIG. 2 of Allan. Such a system does not assign virtual containers according to a subscription for renting software. Thus, the hypothetical combination of the applied references fails to disclose or suggest claim 4. For at least the above reasons, claim 4 is in condition for allowance.

Claim 33 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection because the applied

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 22 of 25

Attorney's Docket No.: 10104-018001

references do not disclose or suggests limitations of claim 33. For example, claim 33 recites a method for providing rental service. The method includes, *inter alia*, subscribing to a package offered by the on-line rental service, the package assigning a collection of virtual containers to one or more users. As recited, claim 33 requires subscribing to a package that assigns a collection of virtual containers to one or more users. Claim 33, thus, requires an assigning of virtual containers to one or more users. For at least the reasons presented above with respect to claim 1, Applicant respectfully submits that claim 33 and its dependent claims are in condition for allowance.

Claim 36 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection. Claim 36 recites a method that includes, *inter alia*, assigning a collection of virtual containers to the user according to the received subscription, wherein each virtual container in the collection is configured to identify one or more software products rented by the user. For at least the reasons presented above with respect to claim 1, Applicant respectfully submits that claim 36 is in condition for allowance.

Claim 37 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection. Claim 37 recites a system that includes, *inter alia*, a rental manager configured to assign a collection of virtual containers to a set of users including one or more users, wherein each virtual container in the collection is configured to identify one or more software products that are rented by users in the set. For at least the reasons presented above with respect to claim 1, Applicant respectfully submits that claim 37 is in condition for allowance.

Claim 44 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection. Claim 44 recites a software product that includes instructions to cause one or more data processing apparatus to perform operations including, *inter alia*, assigning a collection of virtual containers to a set of users including one or more users, each virtual container in the collection being configured to identify one or more software products that are rented by users in the set. For at least the reasons

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 23 of 25

Attorney's Docket No.: 10104-018001

presented above with respect to claim 1, Applicant respectfully submits that claim 44 and its dependent claims are in condition for allowance.

Claim 76 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection. Claim 76 recites a software product that includes instructions to cause one or more data processing apparatus to perform operations including, *inter alia*, subscribing to a package offered by the on-line rental service, the package assigning a collection of virtual containers to one or more users. For at least the reasons presented above with respect to claim 1, Applicant respectfully submits that claim 76 and its dependent claims are in condition for allowance.

Claim 79 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over Allan in view of Reuter. The applicant respectfully traverses the rejection. Claim 79 recites a software product that includes instructions to cause one or more data processing apparatus to perform operations including, *inter alia*, assigning a collection of virtual containers to the user according to the received subscription, wherein each virtual container in the collection is configured to identify one or more software products rented by the user. For at least the reasons presented above with respect to claim 1, Applicant respectfully submits that claim 79 is in condition for allowance.

NEW CLAIMS

Applicant added new claim 80, which depends from claim 1. Support for the new claim can be found at least at the paragraph starting at page 13, line 29. Claim 80 recites that authorizing the user in the set to access the software product includes authorizing based on whether the software product was previously associated with the collection of virtual containers. As recited, authorization is based on whether the software product was previously associated with the virtual container.

Applicant respectfully submits that neither of the applied references discloses the claimed authorizing operation. Allan does not disclose or suggest the claimed virtual container and, thus, does not disclose or suggest authorization based on whether a software product was previously associated with a collection of virtual containers, as required by claim 80. Reuter discloses a

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 24 of 25

Attorney's Docket No.: 10104-018001

data container that is used for virtual storage. However, Reuter does not disclose authorizing access to a software product based on whether the software product was previously associated with a collection of virtual containers, as required by claim 80. Because neither of the applied references discloses or suggests the claimed authorizing operation, their combination also fails to disclose or suggest the claimed authorizing operation. For at least this reason, claim 80 is in condition for allowance.

Applicant added new claim 81, which depends from claim 44. Support for the new claim can be found at least at the paragraph starting at page 13, line 29 and at the paragraph starting at page 16, line 5. Claim 81 recites a software product comprising instructions to cause one or more data processing apparatus to perform operations comprising: authorizing the user in the set to access the software product based on whether the software product was previously associated with the collection of virtual containers. For at least the reasons presented above with respect to claim 80, Applicant respectfully submits that claim 81 is in condition for allowance.

Applicant added claim 82, which recites a computer-implemented method that includes assigning, in accordance with a user's subscription for rental service, one or more virtual containers to the user, a virtual container being configured to identify a software product associated with the virtual container as being rented by a user to whom the virtual container is assigned. Support for claim 82 can be found at least at FIG. 3 and the correspond text. For at least the reasons set forth above with respect to claim 1, Applicant respectfully submits that claim 82 is in condition for allowance.

Applicant : Fox et al.
Serial No. : 10/667,129
Filed : September 16, 2003
Page : 25 of 25

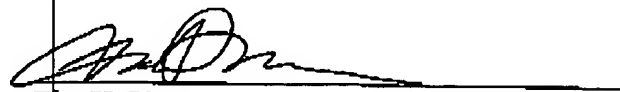
Attorney's Docket No.: 10104-018001

CONCLUSION

Applicant asks that all pending claims be allowed. Please apply excess claim fees of \$350.00, one-month extension of time fee of \$120.00, and any other appropriate charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: MARCH 18, 2005



Tim H. Pham
Reg. No. 48,589

Customer No. 26181
Fish & Richardson P.C.
Telephone: (650) 839-5070
Facsimile: (650) 839-5071

50249597.doc

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.